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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,081	03/01/2002	Takayuki Yamamoto	220119US0	9114

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

JACKSON, MONIQUE R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,081

Applicant(s)

YAMAMOTO ET AL.

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Upon reconsideration based on Applicant's arguments filed 1/7/05, the finality of the prior office action dated 10/18/04 has been withdrawn. Any inconvenience to the Applicant is regretted.

2. Claims 1-4 and 8-15 are pending in the application. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 8, 10-12 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tada et al (USPN 4,352,899.) Tada et al teach an anticorrosive coating composition for metal substrates such as steel substrates that may be provided with a phosphate treatment prior to applying the coating composition (Col. 6, lines 33-44.) The coating composition comprises (A) epoxy resin, (B) an organic phosphorus compound, (C) zinc powder, and (D) a magnesium compound such as a magnesium salt, wherein the content of (C) is 30 to 95%, preferably 75 to 90%, by weight based on the total weight of non-volatile components in the composition and the content of (D) being from 0.1 to 5% by weight based on the total weight of the non-volatile components in the composition (Abstract.) Tada et al teach that the magnesium compound is quite effective in enhancement of the corrosion resistance and may be magnesium sulfate, magnesium phosphate, magnesium acetate, magnesium citrate, etc., with a particle size such as

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preferably passing through a 300 mesh sieve (*hence including particle sizes within the instantly claimed range*, Col. 4, line 64-Col. 5, line 25.) Tada et al further teach that the zinc powder has a particle size of 1 to 15 microns (Col. 4, lines 34-44), and the thickness of the coating is preferably from 5-20 microns (Col. 6, lines 24-26.)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Alternatively, Claims 1-4, 8, 10-12 and 14-15, as well as Claims 9 and 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada et al. The teachings of Tada et al are discussed above. Though Tada et al teach weight percent ranges and particle size ranges that encompass or overlap the instantly claimed ranges, Tada et al do not specifically limit the invention to the instantly claimed values however one having ordinary skill in the art at the time of the invention would have been motivated to utilize routine experimentation to determine the optimum amount and particle size of the zinc powder and magnesium compound to utilize within the ranges taught by Tada et al. With regards to instant Claim 13, Tada et al also teach that the composition may further include various compounds to improve corrosion resistance wherein among those listed are calcium salt compounds that may be employed in an amount of 0.1 to 1% by weight. Though Tada et al do not specifically teach the particle size of these calcium salts, one having ordinary skill in the art at the time of the invention would have been motivated to determine the optimum particle size considering it is well established in the art that particle size

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is a result effective variable in corrosion resistant coating compositions. With respect to instant Claim 9, though Tada et al teach that magnesium phosphate and calcium molybdenate may be included in the composition to improve corrosion resistance, Tada et al do not teach a metal phosphomolybdate salt rust inhibitor as instantly claimed. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize a phosphomolybdate salt because it is recognized in the art to be an equivalent to the other materials listed as suitable compounds for improved corrosion resistance.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McLeod (USPN 4,110,117) teaches a corrosion resistant coating composition comprising a metallic zinc powder having an average particle diameter of 0.5 to 20 microns and calcium or magnesium salt co-inhibitors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Monique R. Jackson', with a stylized flourish at the end.

Monique R. Jackson
Primary Examiner
Technology Center 1700
January 20, 2005